

NEW NAMES AND RECORDS FOR TEXAS COMPOSITAE

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When I agreed to contribute a summary of the Compositae for F. W. Gould's *Texas Plants — a Checklist and Ecological Summary* (cover page date June 1962; actually published January 1963), I fully expected to have time to get the new names validly published in good time, and even dreamed of throwing in keys to at least some of the genera for good measure. But the distractions of moving with a large herbarium to a new building, and subsequently of ill health, shattered the dreams and delayed publication until now. This brief paper is intended primarily to validate several names that appeared in the Checklist as *nomina nuda*; some other name changes and new species or new records which have turned up since completion of the Checklist account are also included. They do not, alas, represent a final word. New names in *Echinacea* and *Thelesperma* await publication of revisions of those genera which have been completed by others. After becoming better acquainted with *Brickellia*, I am satisfied that it cannot be maintained as a genus distinct from *Kuhnia*, but the Herculean task of providing more than 100 new names in the latter genus is temporarily postponed. Southeastern species of *Eupatorium* badly need revision; only two of a number of inevitable name changes are indicated here. *Solidago* needs much more collecting in eastern Texas. Some puzzling, localized forms of *Aster* cannot be disposed of until better material is available. And so on. But despite its shortcomings, I believe the Checklist summary represents very substantial progress with our knowledge of the largest family of plants in Texas.

The following are entirely new records to be added: *Eupatorium scabridum*, *Machaeranthera brevilingulata*, *M. tenuis*, *M. texensis*, *Nothocalais cuspidata*, *Solidago petiolaris* var. *petiolaris*, *Thelesperma curvicaupum*. The following should replace the Checklist names given in parentheses: *Bahia dissecta* (*B. biternata*), *Cirsium Engelmannii* (*C. terrae-nigrae*), *Erigeron superbus* (*E. speciosus* var. *australis*), *E. lobatus* var. *Warnockii* (*E. Warnockii*), *Eupatorium glaucescens* (*E. cuneifolium* var. *semiserratatum*), *Machaeranthera annua* (*M. phyllocephala* var. *annua*), *M. Boltoniae* (*Psilactis asteroides*), *M. pinnatifida* (*M. pinnata*). The name *Erigeron tenuis* var. *minor* should be deleted altogether. The confused status of the names *Evax* and *Filago* is noted under the latter.

ACHILLEA MILLEFOLIUM L. var. OCCIDENTALIS (Rafinesque, ined.) DC., Prodr, 6: 24. 1837. "Frequens a Pennsylvania ad reg. Illinoen-

sem." Including *A. gracilis* Rafinesque, Herb. Raf. p. 22. 1833. Locality not specified, but this is species no. 12 under the heading "Florula Texensis . . . New Dicotyle Plants of Texas and Arkansas." *A. Millefolium* var. *gracilis* (Rafinesque) DC., l.c. "Agro Kentuckiensis." Though *A. gracilis* was published earlier, in the rank of variety the two epithets appeared simultaneously, and I have chosen *occidentalis* as the more appropriate. This earlier name for what is commonly known as *A. lanulosa* or *A. Millefolium* var. *lanulosa* has generally been overlooked.

ARTEMISIA LUDOVICIANA Nuttall var. **albula** (Wooton) Shinnery, comb. nov. *A. albula* Wooton, Contrib. U.S. Nat. Herb. 16: 193. 1913. *A. ludoviciana* ssp. *albula* (Wooton) Keck, Proc. Calif. Acad. Sci. (ser. 4) 25: 446. 1946.

ARTEMISIA LUDOVICIANA var. **redolens** (Gray) Shinnery, comb. nov. *A. redolens* Gray, Proc. Amer. Acad. 21: 393. 1886. *A. vulgaris* ssp. *redolens* (Gray) Hall & Clements, The Phylogenetic Method in Taxonomy (Carnegie Inst. Washington Publ. 326): 75. 1923. *A. ludoviciana* ssp. *redolens* (Gray) Keck, Proc. Calif. Acad. Sci. (ser. 4) 25: 454. 1946.

BAHIA DISSECTA (Gray) Britton. This name should replace *B. biternata* in the list; see Ellison, Rhodora 60: 190—199, 201—204, 1964.

BAHIA NEOMEXICANA Gray. After seeing specimens of the South American *Schkuhria multiflora* Hooker & Arnott, I agree with Heiser's view that the North American plant is the same (see Ann. Mo. Bot. Gard. 32: 274—275, 1945). Ellison agrees with Heiser in leaving the species under *Schkuhria*, but I am not wholly persuaded. If retained under *Bahia*, a new combination based on the Hooker & Arnott name is required.

BAHIA WOODHOUSII Gray. At different times Gray treated this under three different generic names, always spelling the eponymous epithet with the double *i*, as here given. He obviously thought it a better Latin form than *Woodhousei*. He did not misspell the name, as Warnock implies (Wrightia 2: 74, 1960). Ellison also uses the illegitimately "corrected" spelling in his revision.

CENTAUREA SOLSTITIALIS L. Long known from California and more recently from Oklahoma, this Old World species had not previously been reported from Texas. DALLAS CO.: Belt Line Road 0.3 mile west of U.S. Highway 67, Cedar Hill, *David Flyr*, 6 June 1962 (SMU). "Also seen about one mile north of Cedar Hill."

CHRYSOTHAMNUS VISCIDIFLORUS (Hooker) Nuttall var. **ludens** Shinnery, var. nov. Folia glabra vel scabro-puberula lineari-oblongata, majora 2.0—2.5 cm. longa, 2—3 mm. lata. Capitula pauca congesta ramos erectos terminantia. Involucra 5.0—5.5 mm. alta. Corollae profunde divisae lobis angustis 2—3 mm. longis. Achaenia glabra vel ad angulos parvisse appresse hirsutula. HOLOTYPE: Guadalupe Mts. above Pine Springs Station, Culberson Co., Texas, *Shinnery 9063*, 15 Aug.

1946 (SMU). "On higher slopes, elev. about 6000 ft. Shrubs $\frac{1}{2}$ —1 m. tall, virgate; bark blackish to gray-brown." PARATYPE: Infrequent perennial in limestone soil above Hunter Lodge, in South McKittrick Canyon, Guadalupe Mts., alt. 9499 feet (*sic!* collection number by error repeated for altitude; highest point in the range is 8751 ft.), Culberson Co., Barton H. Warnock 9499, 13 Aug. 1949 (SMU). This somewhat isolated representative of the *C. viscidiflorus* complex is named in allusion to the fact that it will not fit any of the possible choices in the key to subspecies given in the Hall & Clements monograph (The Phylogenetic Method in Taxonomy, Carnegie Inst. Washington Publ. 326: 181, 1923), and because of the glabrous or glabrate achenes will hardly even fit in the key to species (l.c. 175). A similar but judging from the description distinct plant has just been described from New Mexico as *C. spathulatus* L. C. Anderson, Madrono 17: 226—227, 1964.

CIRSIUM ENGELMANNII Rydberg, Fl. Rocky Mts. 1013 and 1069. 1917. Based on *C. virginianum* var. *filipendulum* Engelmann ex Gray, Man. ed. 2 p. 233. 1856. (Not *C. filipendulum* Lange, 1861.) *C. terrae-nigrae* Shinners, Field & Lab. 17: 27—29. 1949. Purposely based on a different type, but taxonomically identical with the preceding. Rydberg's name is as to type, not as to plant described; the Blackland Prairie thistle does not extend even as far as the High Plains, let alone the Rocky Mountains. It is confined to a narrow belt from south central Oklahoma to central Texas, with an outlying southern station in Harris County, Texas. I am indebted to Dr. R. J. Moore of the Plant Research Institute, Canada Department of Agriculture, Ottawa, for calling my attention to my oversight in providing another name for the species.

ENCELIA SCAPOSA Gray var. *stenophylla* Shinners, var. nov. A var. *scaposa* recedit foliis angustissimis 1.0—3.5 mm. latis (vice 3—7 mm.). HOLOTYPE: 9 $\frac{1}{3}$ miles east of Dryden, Terrell Co., Texas, V. L. Cory 43870, 28 March 1944 (SMU). A second sheet, probably a duplicate but numbered 43869 (it was Mr. Cory's practice at that time to number every sheet rather than every collection), is designated PARATYPE, same place and date (SMU). *E. scaposa* var. *scaposa* occurs farther west at higher elevations, in Hudspeth and Jeff Davis counties.

ERIGERON SUPERBUS Greene. This name should replace *E. speciosus* var. *australis* in the list. The only Texas specimen seen (Davis Mts., Jeff Davis Co., M. S. Young, 13 Sept. 1918, TEX) has distinctly ciliate leaves as in *E. speciosus*, but otherwise seems definitely to belong with *E. superbis*, which was reported from the same locality by Cronquist (Brittonia 6: 150—151, 1947).

ERIGERON TENELLUS DC., Prodr. 5: 288. 1836. "In Mexico circa Tamaulipas in campis Matamoros legit cl. Berlandier martio flor." This species seems to have been completely overlooked since its original description. In above-ground parts it greatly resembles *E. tenuis* T. & G., and Texas collections have been referred to that species. But *E. tenellus*

is an annual with a slender taproot, while *E. tenuis* is perennial with fibrous roots from a stubby crown. The following three collections from Cameron Co., close to the type locality just over the border in Mexico, may be cited (all SMU). About 8 miles west of Boca Chica, *Lundell & Lundell 10778*, 17 March 1942. Yard in Brownsville, *J. F. Brenckle 47-325*, 3 April 1947. Along Highway 106 E. of Harlingen at Harlingen Air Force Base, *Alfred Traverse 1018*, 21 April 1959.

ERIGERON Traversii Shinnery, sp. nov. (Sect. *Phalacrolooma*.) *E. strigosus* peraffinis, sed foliis infimis saepe pinnatim dentato-lobulatis vel sublyratis sicut in *E. tenui*, praecox (Marte-Maio florens), formosior, ligulis latioribus (0.8—1.2 mm., vice 0.5—1.0 mm.) candidis vel rarissime carneis. HOLOTYPE: Off U.S. 59, about 8 miles south of Nacogdoches, Nacogdoches Co., Texas, *Lundell & Lundell 11093*, 11 April 1942 (SMU). Pine Belt of eastern Texas and adjacent Louisiana, flowering two to four weeks ahead of *E. strigosus*, a showier plant easily distinguished in the field though not in the herbarium. The following additional collections have been seen. TEXAS. Jasper Co.: 6 miles southeast of Jasper, *Shinnery 18,402*, 9 April 1954 (SMU). Nacogdoches Co.: 15 miles south of Nacogdoches, *B. L. Turner 4377*, 12 April 1958 (TEX). "Dark pink-flowered form among a population of white-flowered types. Only plant of this color seen in the vicinity." Newton Co.: 3 miles west of Newton, *Shinnery 18,387*, 9 April 1954 (SMU). Panola Co.: 4.3 miles southeast of Tatum, *Shinnery 18,503*, 9 April 1954 (SMU). Sabine Co.: 12 miles southeast of Patroon, *Eula Whitehouse 20,861*, 18 March 1949 (SMU). 4 miles south of San Augustine, *Shinnery 18,450*, 9 April 1954 (SMU). Shelby Co.: 10 miles southeast of Center, *Shinnery 7618*, 10 May 1945 (with many empty receptacles, the flowers fallen) (SMU). LOUISIANA. Sabine Parish: 4.8 miles south of Many, *Shinnery 22,772*, 23 April 1956 (SMU).

When Dr. Traverse brought me specimens of *Erigeron tenellus* for identification, I at first intended to name that species for him, recognizing it as different from any previously known from the United States. When it proved to have been named from Mexico, this species was used instead, in appreciation for the many excellent collections made by him in the Gulf States from Texas to Florida.

ERIGERON LOBATUS A. Nelson var. **Warnockii** Shinnery, var. nov. A var. *lobatus* differt pedunculis strigosis subglandulosis. HOLOTYPE: Brewster Co., Texas (without precise locality), *Warnock 424*, 15—23 March 1941 (TEX). The only collection seen. *E. lobatus* var. *lobatus*, of Arizona, has peduncles with widely spreading instead of mostly appressed hairs and moderately to densely glandular.

EUPATORIUM GLAUDESCENS Elliott, Sketch Bot. S.C. & Ga. 2: 297. 1822. *E. cuneifolium* Willdenow, Sp. Pl. (ed. 4) 3 pt. 3: 1753. 1803. (Illegitimate name: the earlier *E. Marrubium* Walter is cited as synonym without qualification, but not adopted.) *E. semiserratum* DC., Prodr. 5:

177. 1836. *E. cuneifolium* var. *semiserratum* (DC.) Fernald & Griscom, *Rhodora* 37: 179. 1935. *E. parviflorum* var. *lancifolium* T. & G., *Fl. N.A.* 2: 85. 1841. *E. semiserratum* var. *lancifolium* (T. & G.) Gray, *Syn. Fl. N.A.* 1 pt. 2: 98—99. 1884. The complex to which these names relate is a most difficult one. Size of involucre, used by both Fernald and Cronquist to distinguish this from *E. linearifolium* and related plants, is not a reliable character. I have adopted the oldest valid name as species. Unless var. *lancifolium* and var. *semiserratum* can be shown to be taxonomically separable, the former name must replace the latter. My studies have not progressed sufficiently for me to state any conclusions.

EUPATORIUM SCABRIDUM Elliott, *Sketch Bot. S.C. & Ga.* 2: 299—300. 1822. *E. rotundifolium* var. *scabridum* (Elliott) Gray, *Syn. Fl. N.A.* 1 pt. 2: 99. 1884. This is another of those species which, although originally described from the Southeast, is rather rare there, but is widespread and common west of the Mississippi River, especially in Arkansas and Louisiana. Local in TEXAS. Newton Co.: State Forest No. 1, 5 miles east of Kirbyville, *Cory* 49,775, 30 Sept. 1945 (SMU). Smith Co.: Swan, *J. Reverchon* 3302, 17 Sept. 1902 (SMU). Wood Co.: 6 miles south of Quitman, *Shinners* 11,706, 11 Sept. 1948 (SMU). I have seen two specimens from Florida and one from South Carolina agreeing with Elliott's description. Leaves smaller than in *E. rotundifolium*, with distinctly cuneate bases.

FILAGO. The following new names were recently published for the Texas plants previously listed under *Evax*: *F. candida* (T. & G.) Shinners, *F. Nuttallii* Shinners (*Evax prolifera* Nuttall, not *Filago prolifera* Pomel), *F. verna* (Rafinesque) Shinners (*Evax multicaulis* DC., a later name than *E. verna* Rafinesque), and *F. verna* var. *Drummondii* (T. & G.) Shinners. There was a belated attempt to conserve the name *Filago* in the previous sense by the questionable device of typifying it with a species added in the Appendix to *Species Plantarum* rather than one given in the main text. Presumably the proposal has been acted upon by the Edinburgh Congress, but as this goes to press I do not know what was decided. If *Filago* is thus conserved, there will have to be another new combination for the last-mentioned variety under *Evax verna*.

HELIANTHUS ANNUUS L. var. **texanus** (Heiser) Shinners, comb. nov. *H. annuus* ssp. *texanus* Heiser, *Amer. Midl. Nat.* 51: 299. 1954.

HELIANTHUS **ludens** Shinners, sp. nov. Annuua? (radix deest) parva erecta 32—43 cm. alta hispidulo-pubescentis suprene corymboso-ramosa. Folia petiolata laminis lanceolatis integris vel leviter sinuato-dentatis triplinerviis. Capitula pauca mediocria involucris 7 mm. altis phyllariis lanceo-linearibus sub-3-seriatis subaequalibus subappressis discum vix aequantibus. Flores radii et disci flavi. HOLOTYPE: Lobo Flat, 19 miles east of Van Horn, Culberson Co., Texas, *Turner, Tharp & Warnock* 53-543, 28 Aug. 1953 (SMU). "Ditch beside cotton field." In aspect more

like a *Verbesina* or *Viguiera*, but the achenes and pappus are definitely those of *Helianthus*.

IVA AUGUSTIFOLIA Nuttall var. **latior** Shinnery, var. nov. Folia caulina laminis lanceolatis ad 50×12 mm., suprema laminis anguste lanceolatis nec lineari-filiformibus. HOLOTYPE: south of Falfurrias, in sandy oak region, Brooks Co., Texas, Lundell & Lundell 11947, 15 Sept. 1942 (SMU). Even the reduced leaves in the inflorescence are distinctly lanceolate, not "linear to linear-filiform" as described in R. C. Jackson's revision (Univ. Kansas Sci. Bull. 41: 805, 1960) and as found in specimens of var. *angustifolia*. Stem leaves of the latter, as described by Jackson, are 5—10 times as long as wide. A second specimen referred to the new variety is divided at base into three stems, the central one with a branch just above base, and has lost the middle and lower leaves; the upper ones are 5—6 times as long as wide. Goliad Co.: 9.5 miles south of Goliad, Shinnery 25,206, 13 Oct. 1956 (SMU). Both collections are from southwest of the range of var. *angustifolia* as understood here.

MACHAERANTHERA annua (Rydberg) Shinnery, comb. nov. *Sideranthus annuus* Rydberg, Bull. Torr. Bot. Club 31: 653. 1904. *Haplopappus phyllocephalus* ssp. *annuus* (Rydberg) Hall, The Genus *Haplopappus* (Carnegie Inst. Washington Publ. 389): 58. 1928. *Machaeranthera phyllocephala* var. *annua* (Rydberg) Shinnery, Field & Lab. 18: 40. 1950. An erect annual, resembling a small *Prionopsis ciliata*, quite distinct from the coastal *M. phyllocephala*.

MACHAERANTHERA BOLTONIAE (Greene) Turner & Horne, Brittonia 16: 328. 1964. This name should replace *Psilactis asteroides* in the list; transfer of the latter is prevented by *Machaeranthera asteroides* Greene, a different species.

MACHAERANTHERA BREVILINGULATA (Schultz-Bipontinus) Turner & Horne, l.c. 324. *Psilactis brevilingulata* Schultz-Bipontinus ex Hemsley. This species should be added to the list as NAW from Region 10.

MACHAERANTHERA PINNATIFIDA (Hooker) Shinnery, Sida 1: 295. 1964. This name should replace *M. pinnata* in the list.

MACHAERANTHERA TENUIS (S. Watson) Turner & Horne, Brittonia 16: 326. 1964. This species should be added to the list as NAW from regions 6 and 10.

MACHAERANTHERA texensis (R. C. Jackson) Shinnery, comb. nov. *Haplopappus texensis* R. C. Jackson, Rhodora 64: 142—143. 1962. This species should be added to the list as NPW from Region 6.

NOTHOCALIS CUSPIDATA (Pursh) Greene. *Troximon cuspidatum* Pursh. *Agoseris cuspidata* (Pursh) Steudel. *Microseris cuspidata* (Pursh) Schultz-Bipontinus. This Great Plains species has been known from as far south as Oklahoma; it occurs also in the Texas Panhandle, in Lipscomb, Ochiltree, and Roberts counties, where it was collected by Charles S. Wallis in 1960. The nomenclature follows that of Kenton L.

Chambers (see Contrib. Dudley Herb. 5: 66—67, 1957). It should be added to the list as NPC from Region 9.

SENECIO SPARTIOIDES T. & G. var. **Parksii** (Cory) Shinnery, comb. nov. *S. Riddellii* var. *Parksii* Cory, *Rhodora* 45: 164. 1943.

SENECIO **Warnockii** Shinnery, sp. nov. Species gypsogena *S. spartiodeo* affinis. Perennis sublignosa humilis 10—30 cm. alta multicaulis plus minusve floccoso-albescens. Folia crebra angustissime linearia carnosa 3—7 cm. longa ca. 1 mm. lata integerrima. Capitula, involucra, floesque ut in *S. spartiodeo*. HOLOTYPE: 40 miles north of Van Horn, alt. 4000 ft., Culberson Co., Texas, *Turner & Warnock* 202, 16 Sept. 1948 (SMU). When the troublesome *S. spartioides* complex is revised this may be reduced in status, but with its dwarf stature and crowded, entire leaves, it is a much more extreme departure from the type than any of the other variants included under that binomial. Three additional collections have been seen. TEXAS. Culberson Co.: gyp soil along pipeline between Texline and Orla, *Warnock* 10,276, 7 Oct. 1951 (SMU). County not determined: 2 miles south of Rustlers Springs, *Parks & Cory* 30830, 20 Oct. 1938 (SMU). NEW MEXICO. Eddy Co.: 13 miles S.W. of White City (S. of Carlsbad), *David B. Dunn* 8732, 12 Oct. 1952 (SMU). "Arid alkaline grassland. Caliche beds exposed. El. 3800 ft."

SOLIDAGO PETIOLARIS Aiton var. PETIOLARIS. This was inadvertently omitted from the list. It should be included as NPW from Region 1.

THELESERMA CURVICARPUM Melchert, S.W. Nat. 8: 179. 1963. This should be added to the list as NAC from Region 7.

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